



Viral Hepatitis B and C Epidemiology in North Carolina 2018

August 2019

Division of Public Health/Epidemiology Section/Communicable Disease Branch

HIV/STD/Hepatitis Surveillance Unit



NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES



North Carolina
Public Health



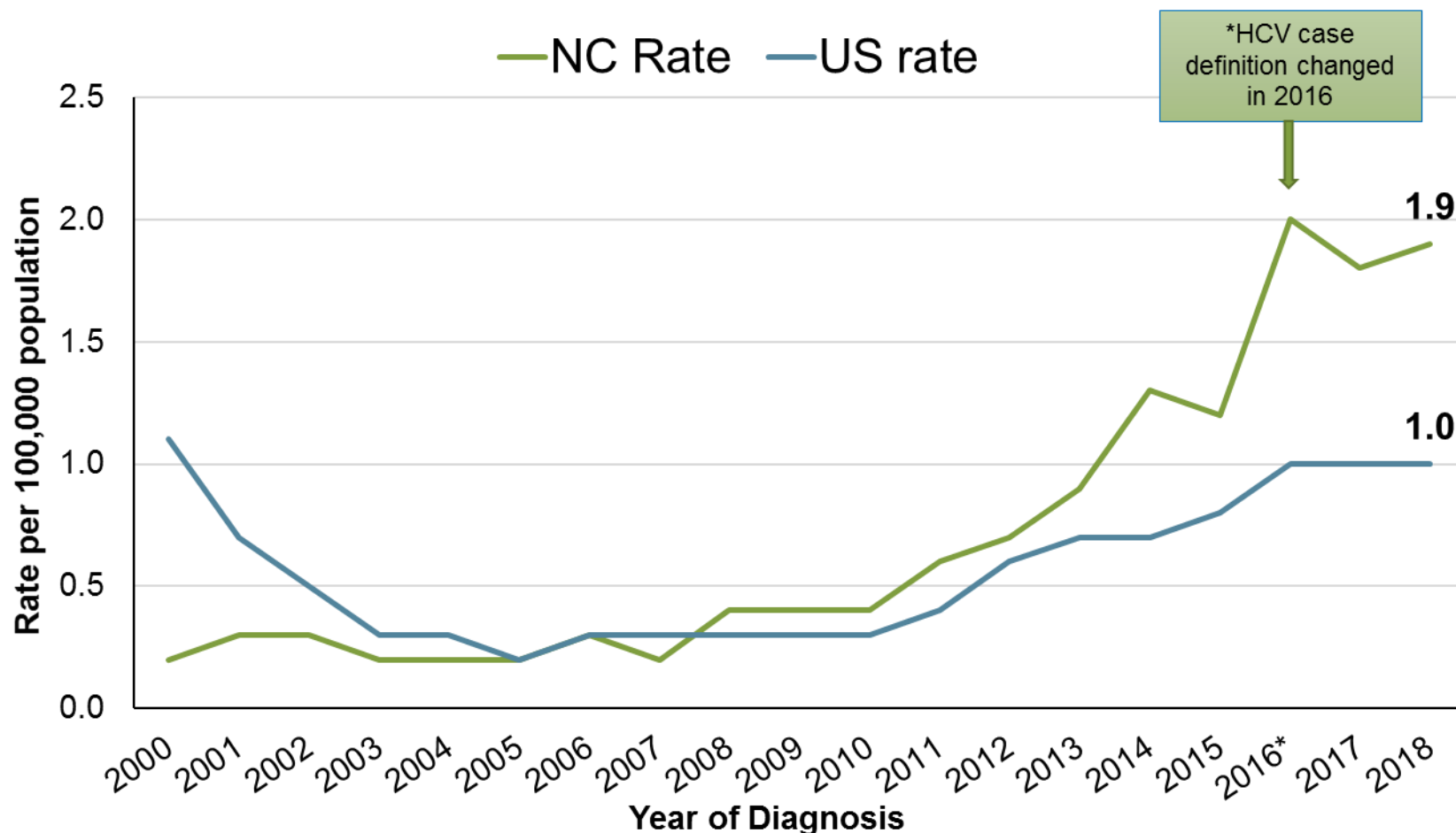
Where to find Hepatitis B/C Information?

The screenshot shows the North Carolina Department of Health and Human Services (NCDHHS) website. The main navigation bar includes links for 'Individuals & Families', 'Local Health Depts', 'Healthcare Providers', 'Schools, Businesses & Community Groups', and 'Facts & Figures'. The 'Facts & Figures' section is highlighted, showing a sidebar with links to 'Communicable Disease HOME', 'A-Z Diseases & Topics', 'STDs/STIs', 'Facts & Figures', 'Annual Reports', 'Quarterly Reports', 'Fact Sheets and Slides', 'Archive Reports', 'How to Report', 'HIV/STD Epidemiologic Profile', 'Programs & Services', 'Surveillance & Reporting', 'Disease Laws & Rules', 'About Us', 'Contact Us', and 'Quick Links'. The main content area is titled 'Facts & Figures' and 'North Carolina HIV/AIDS, STDs, and Viral Hepatitis B and C'. It includes a 'What We Do' section, a 'Please Note' about data release policy, and a 'Data' section with links to 'Annual Reports', 'Quarterly Reports', 'Fact Sheets and Slides', 'Archive', 'North Carolina HIV/STD Epidemiologic Profile', and 'Forms' (including 'How to Report'). A 'Most Recent' section displays a 'North Carolina HIV/STD Quarterly Surveillance Report Yr1 2018, No. 2'.

<http://epi.publichealth.nc.gov/cd/stds/figures.html>



Acute HCV Rates in North Carolina and United States, 2000-2018

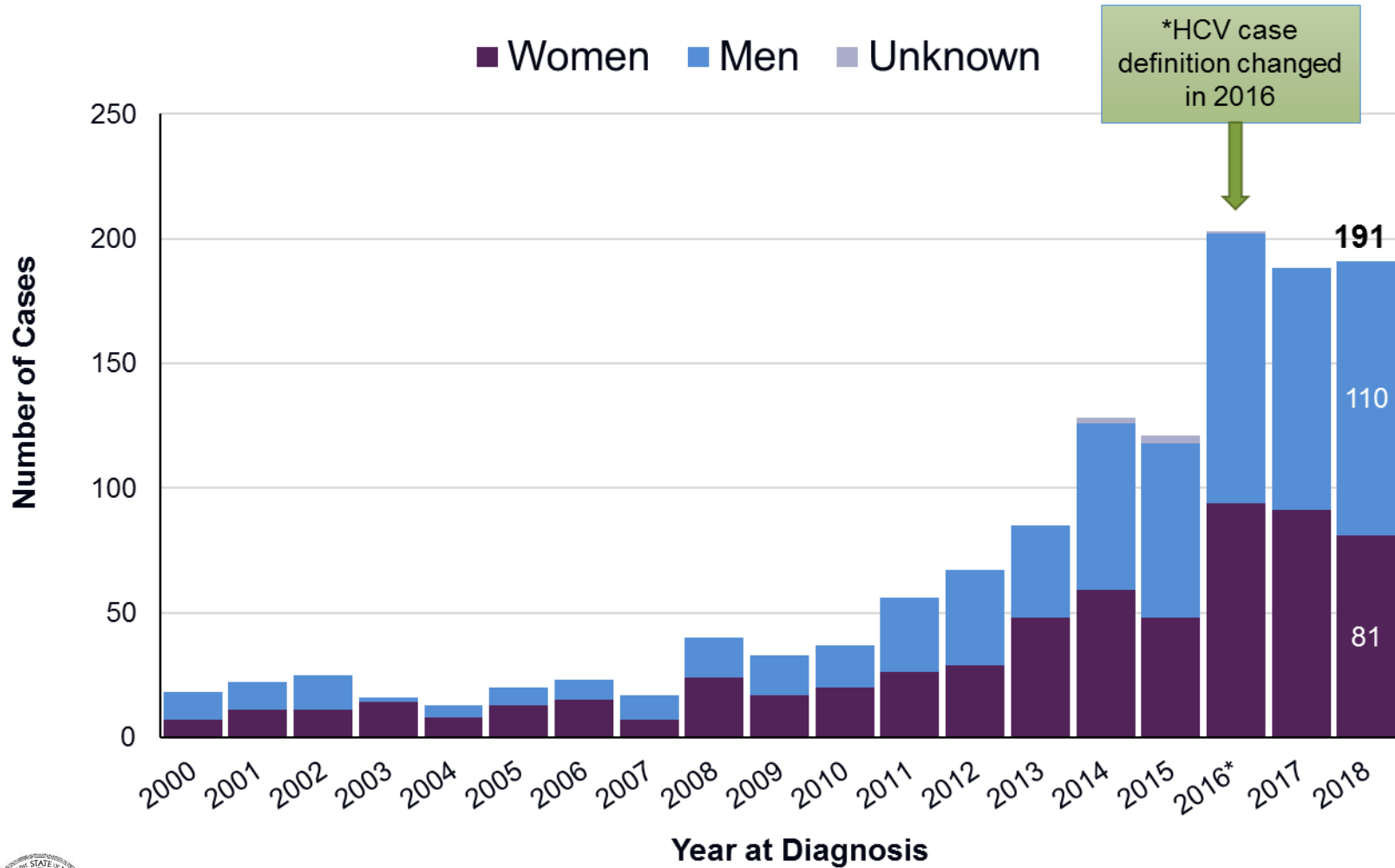


*Case definition for HCV changed in 2016.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019) and Surveillance for Viral Hepatitis, United States, 2009-2015 CDC reports (<https://www.cdc.gov/hepatitis/statistics/index.htm>).



Acute HCV Cases By Gender North Carolina, 2000-2018



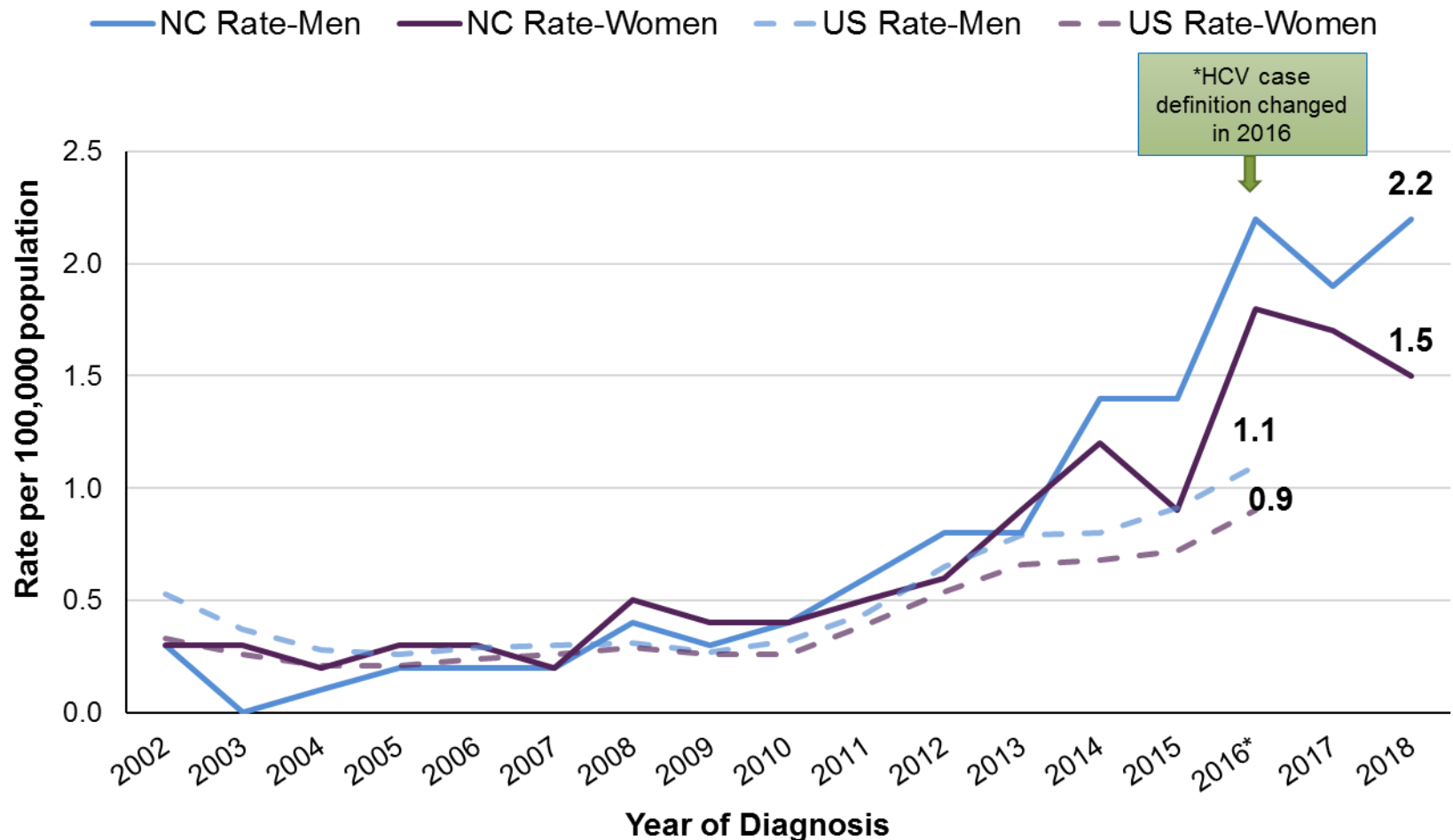
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*Case definition for HCV changed in 2016.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).



Acute HCV Rates by Gender in North Carolina and United States, 2000-2018



*Case definition for HCV changed in 2016.

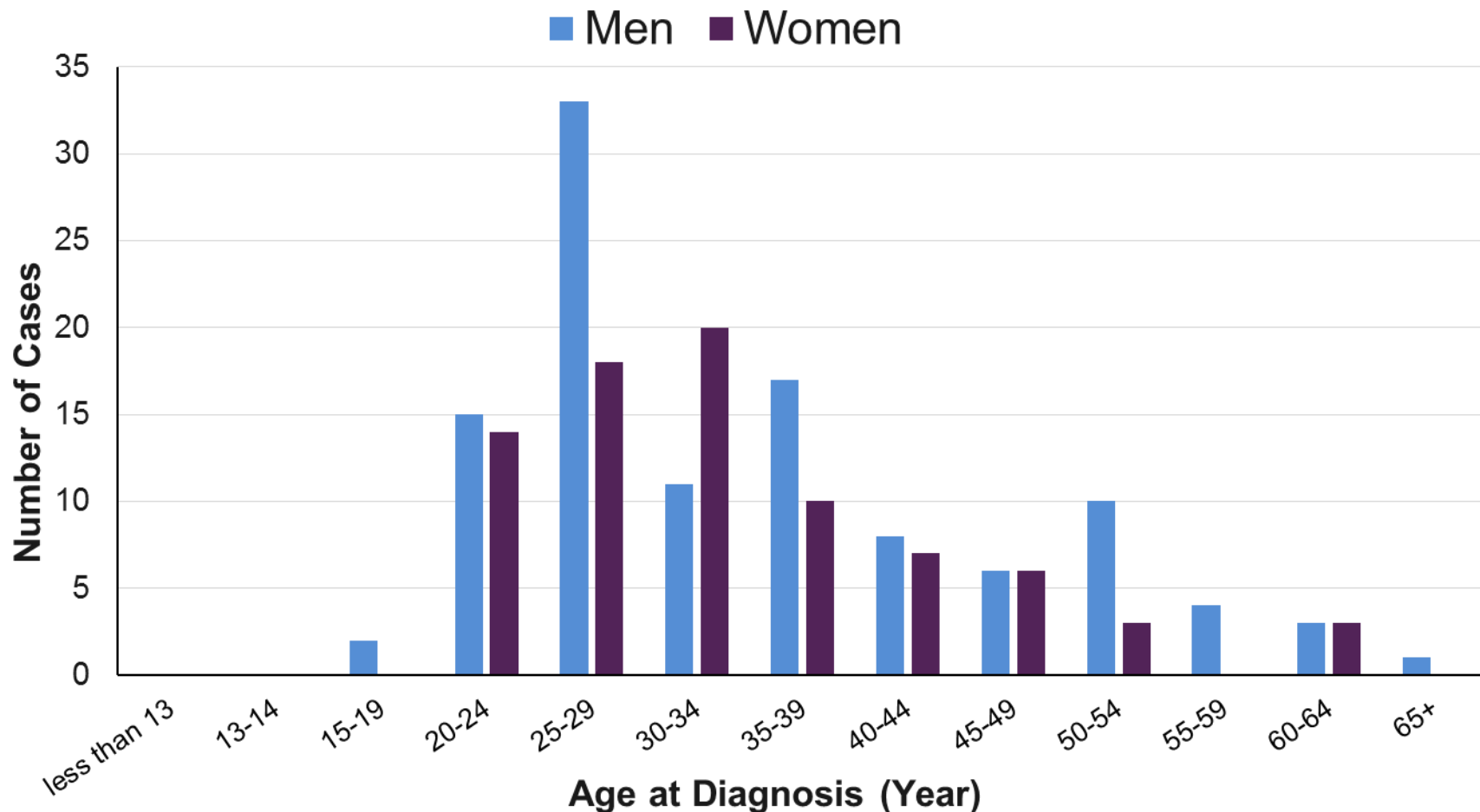
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 3, 2018) and Surveillance for Viral Hepatitis, United States, 2000-2016 CDC reports (<https://www.cdc.gov/hepatitis/statistics/index.htm>).



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Age Distribution of Acute HCV Cases by Gender, North Carolina, 2018



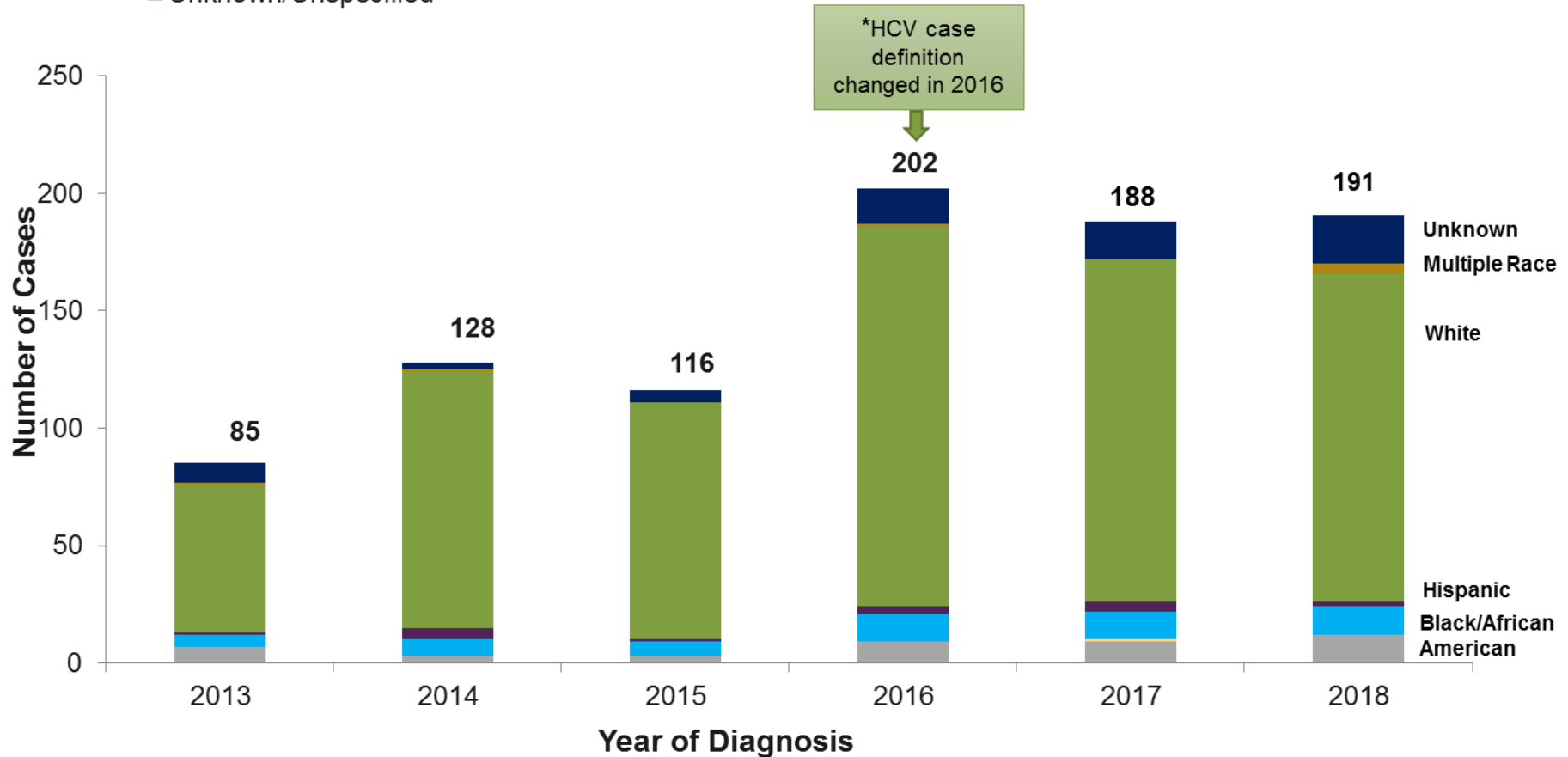
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Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).



Acute HCV Cases by Race/Ethnicity North Carolina 2013-2018

■ American Indian/Alaskan Native* ■ Asian/Pacific Islander* ■ Black/African American*
 ■ Hispanic/Latino ■ White/Caucasian* ■ Multiple Race
 ■ Unknown/Unspecified



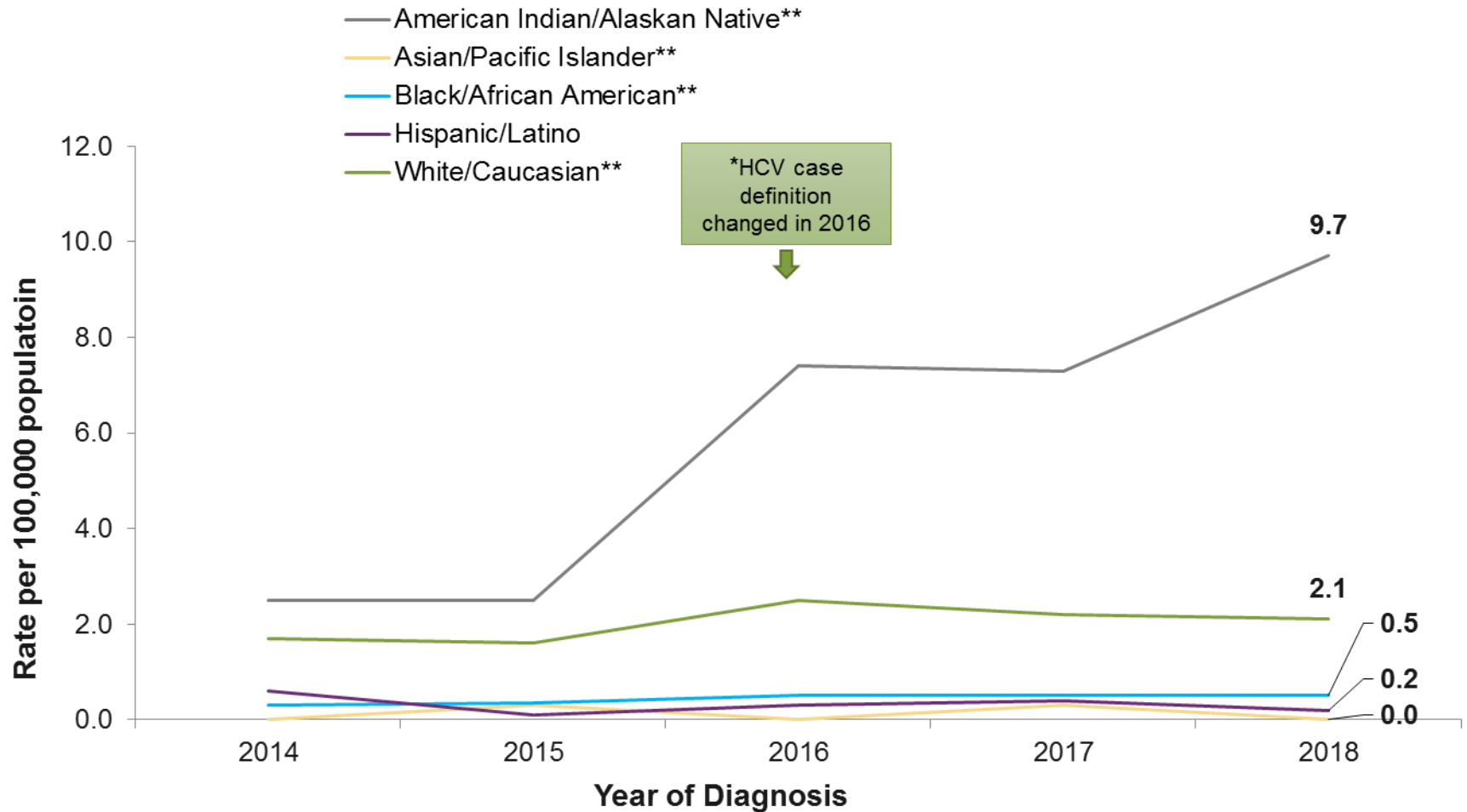
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*Case definition for HCV changed in 2016.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).



Acute HCV Rates by Race/Ethnicity North Carolina 2014-2018

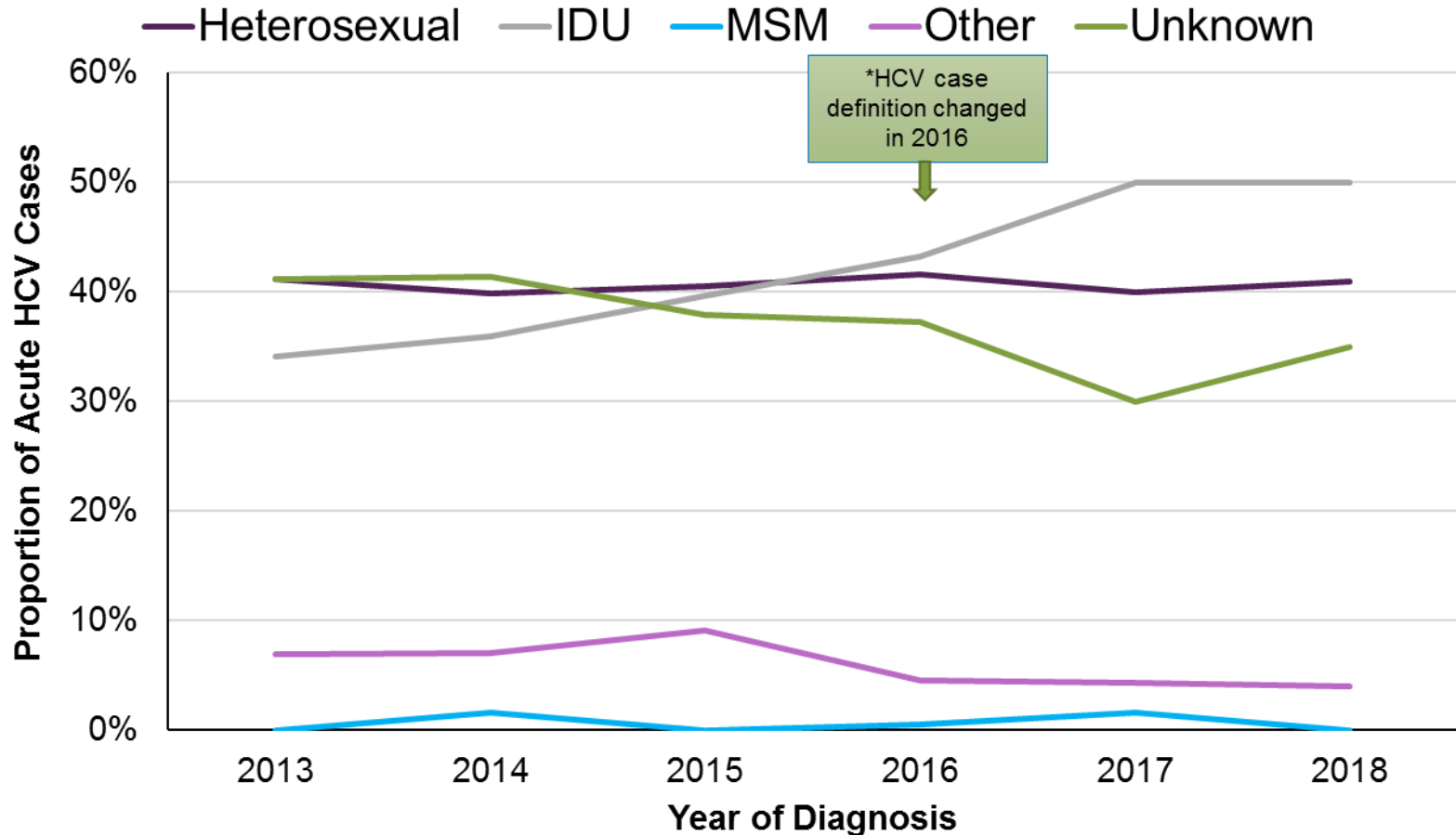


*Case definition for HCV changed in 2016.

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 3, 2018).



Acute HCV Cases by Reported Risk* North Carolina 2013-2018

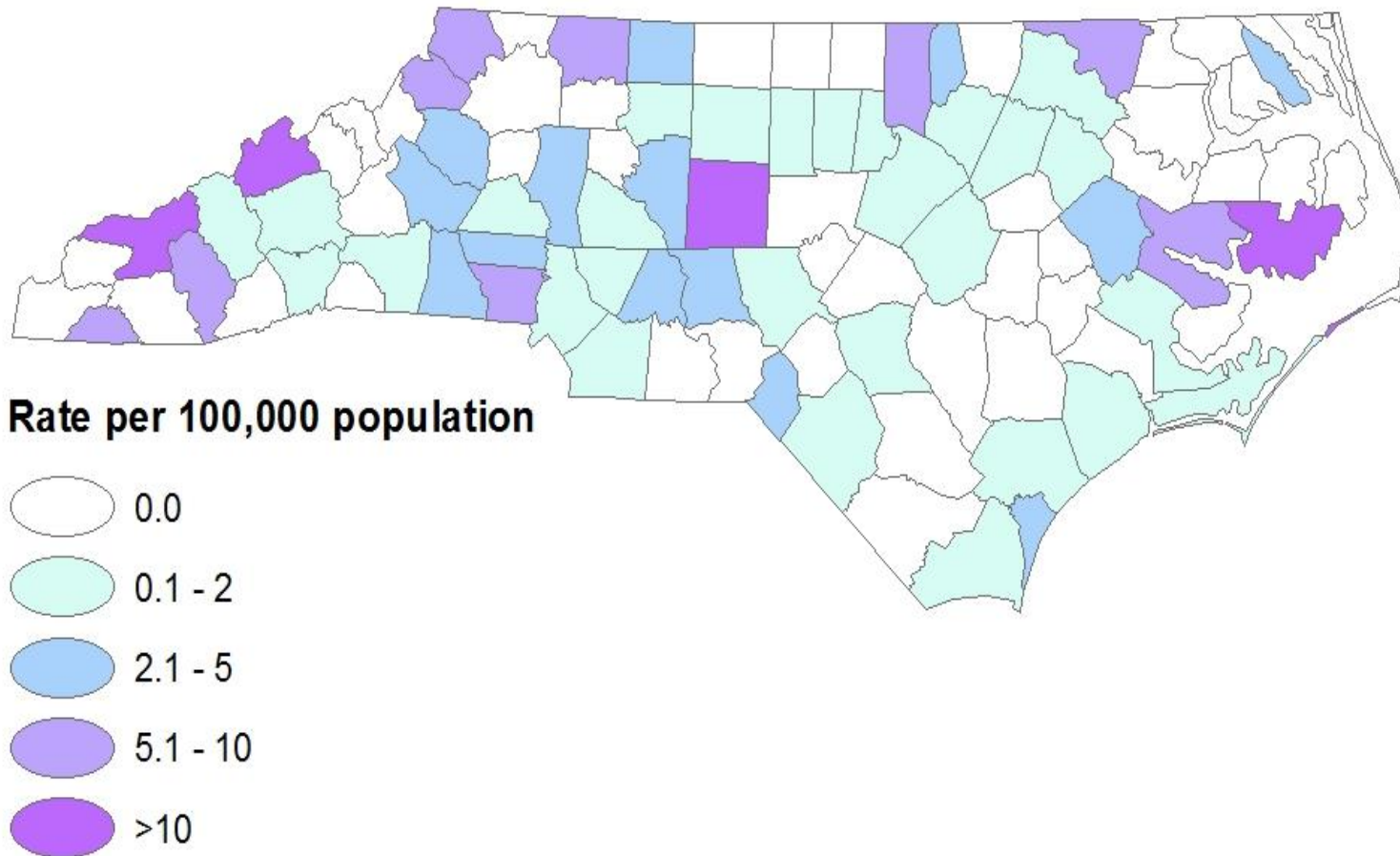


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*People may report more than one risk, so totals may not add up to the case total. Rates are not presented due to the lack of population data for the exposure groups. Other risk includes healthcare exposure, or contact with a positive HCV individual.
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).

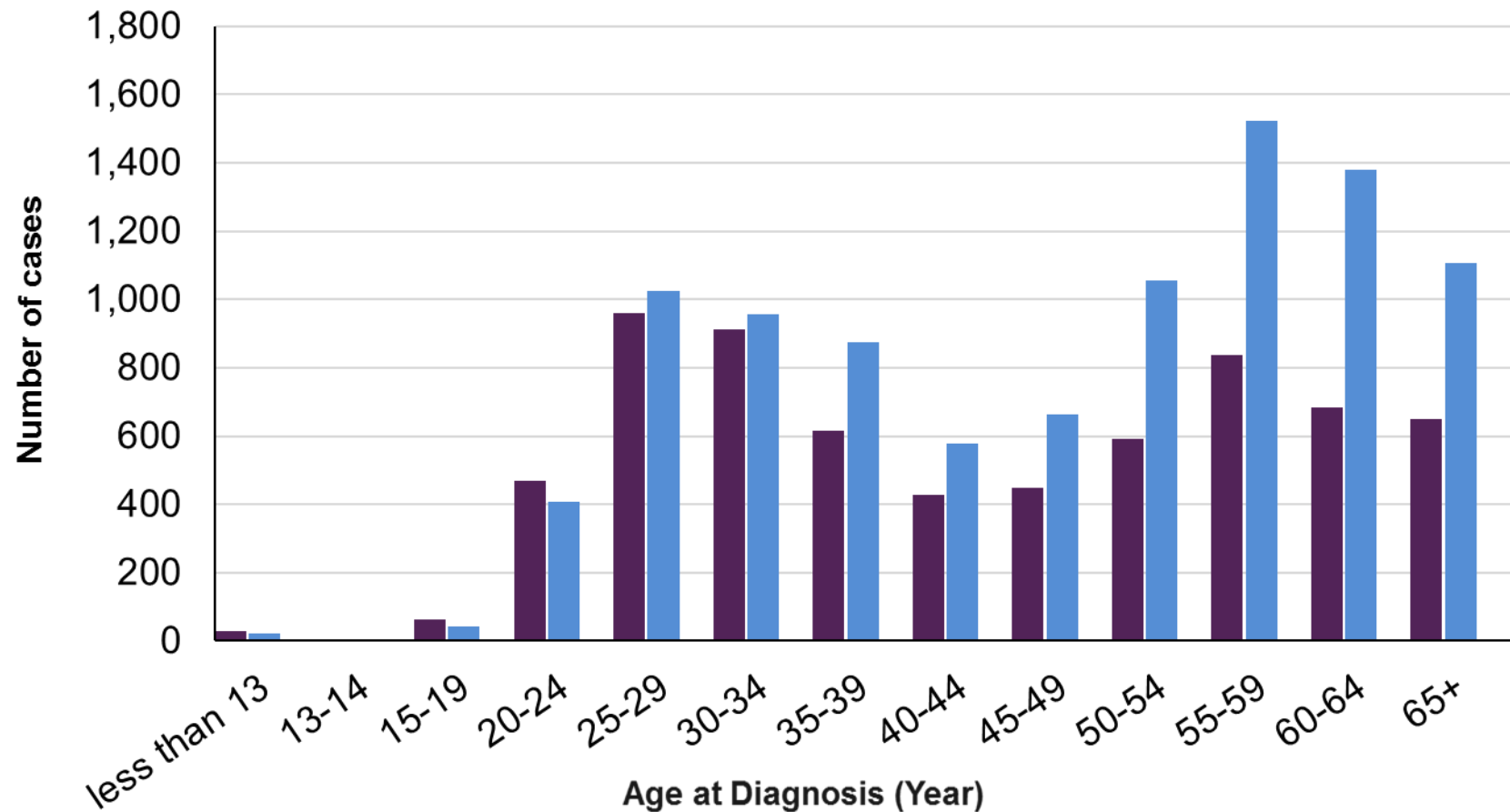


Acute HCV County Rates in North Carolina 2018



Age Distribution of Chronic HCV Cases by Gender, North Carolina, 2018

■ Women ■ Men ■ Unknown

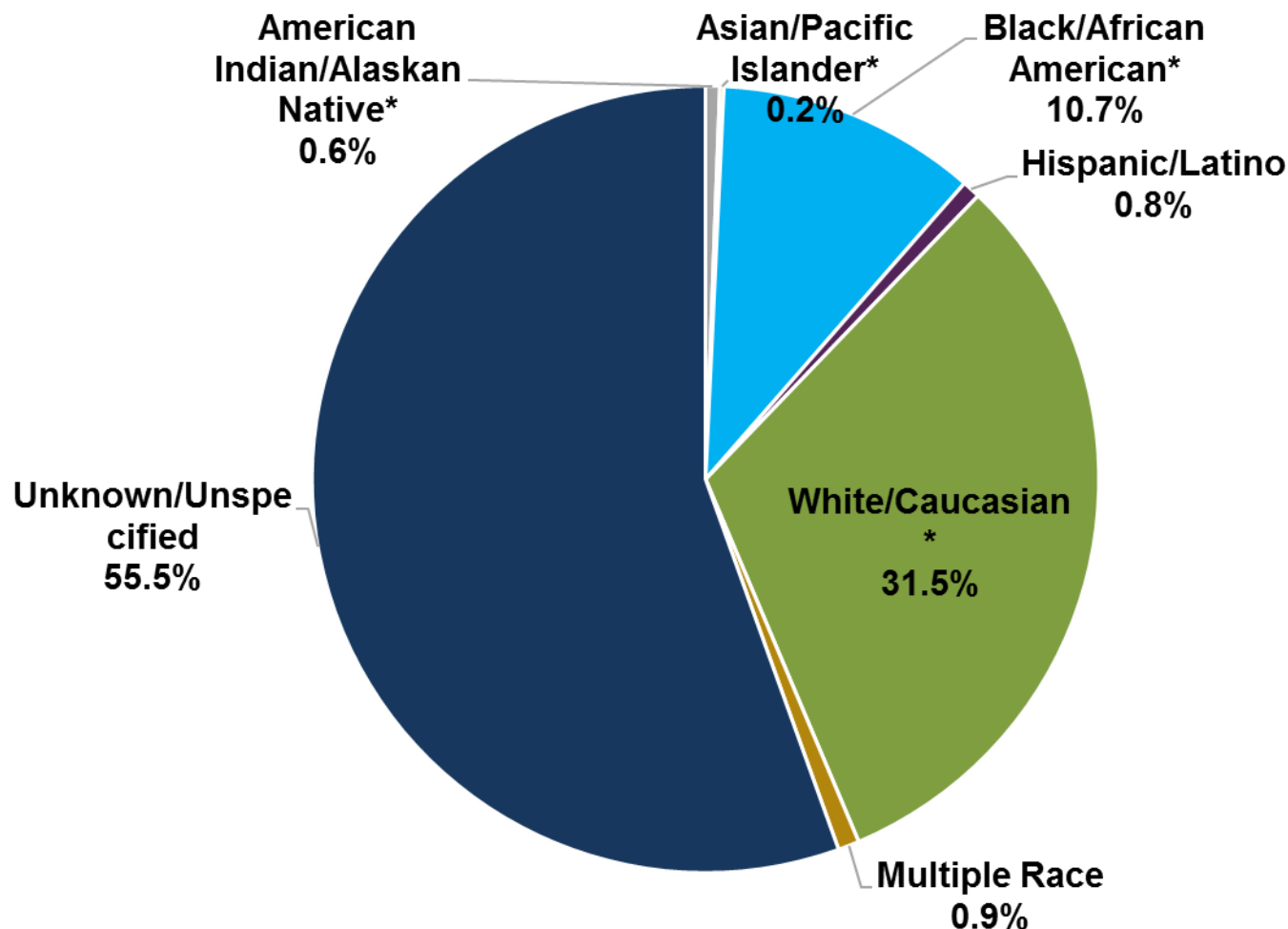


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Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).



Chronic HCV Cases by Race/Ethnicity North Carolina 2018

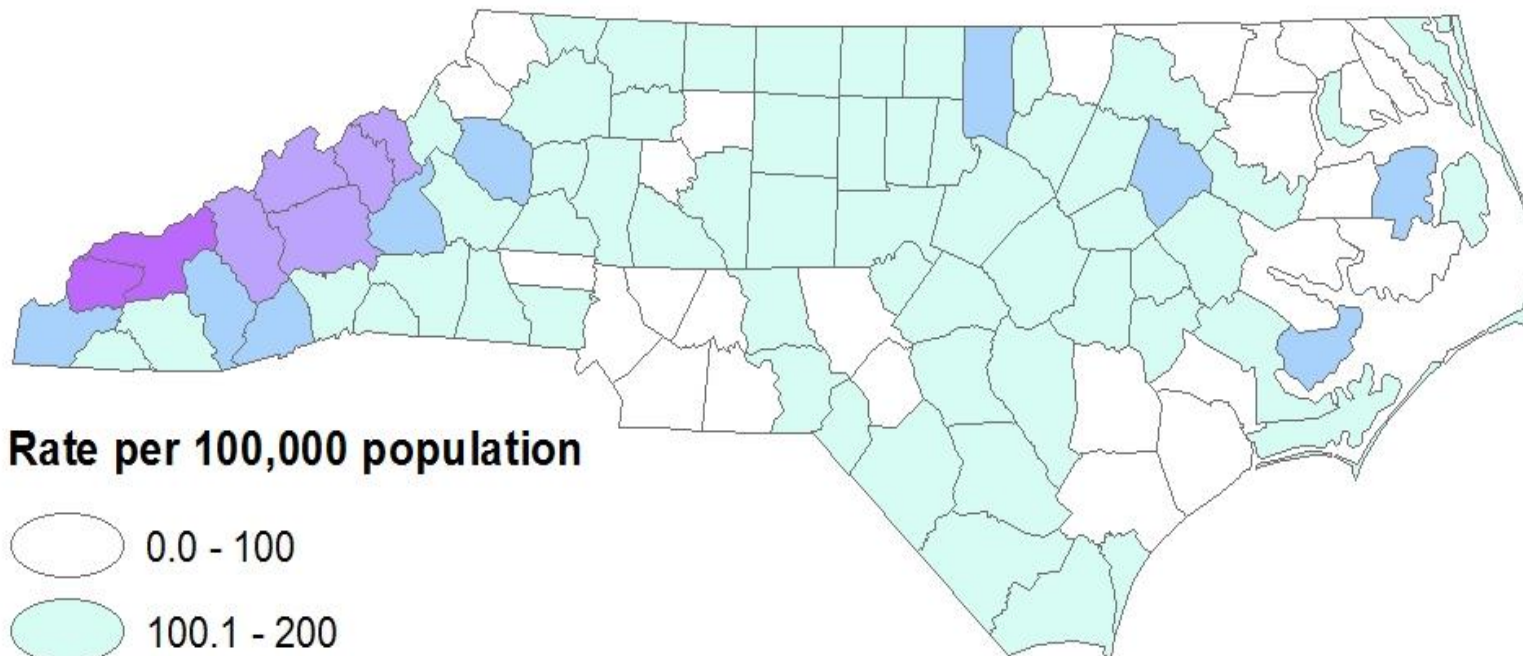


*Non-Hispanic/Latino

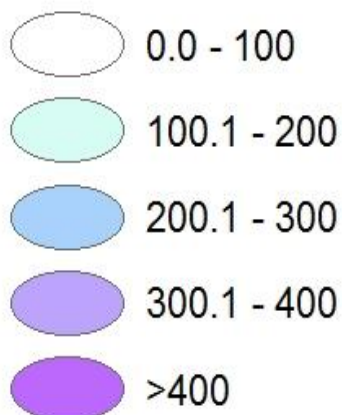
Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).
Risk information is unavailable. Chronic HCV is not investigated.



Chronic HCV County Rates in North Carolina 2018



Rate per 100,000 population



VIRAL HEPATITIS AND CO-MORBIDITIES



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Conquering the Syndemic: The Impact of HCV, HIV, and Opioid Overdoses in North Carolina

HCV

- Reported acute HCV, 2018¹ = 191 (5-fold increase from 2010)
- Estimated people living with chronic HCV in U.S., 2016² = 2.4 million (Trends in mortality and curative treatment indicate the prevalence is lower today.)
- Average lifetime treatment cost of chronic HCV³ = \$100,000/person

Syndemic

- Estimate 7-13% of HIV-infected people in NC are co-infected with HCV (CDC estimates 25%)^{4,5}
- At least 6% of people diagnosed with HIV in NC in 2018 were exposed through injection drug use¹
 - An estimated 50%–90% of HIV-infected injection drug users are co-infected with HCV⁶
 - Around 50% of people with acute HCV in 2018 reported injection drug use¹

Opioid Overdoses

- Prescription opioid deaths in NC, 2016⁷ = 1,194
- Heroin deaths, 2016⁷ = 697
- CDC estimates the cost of drug overdose deaths in NC, 2016⁸ = \$1.3 billion

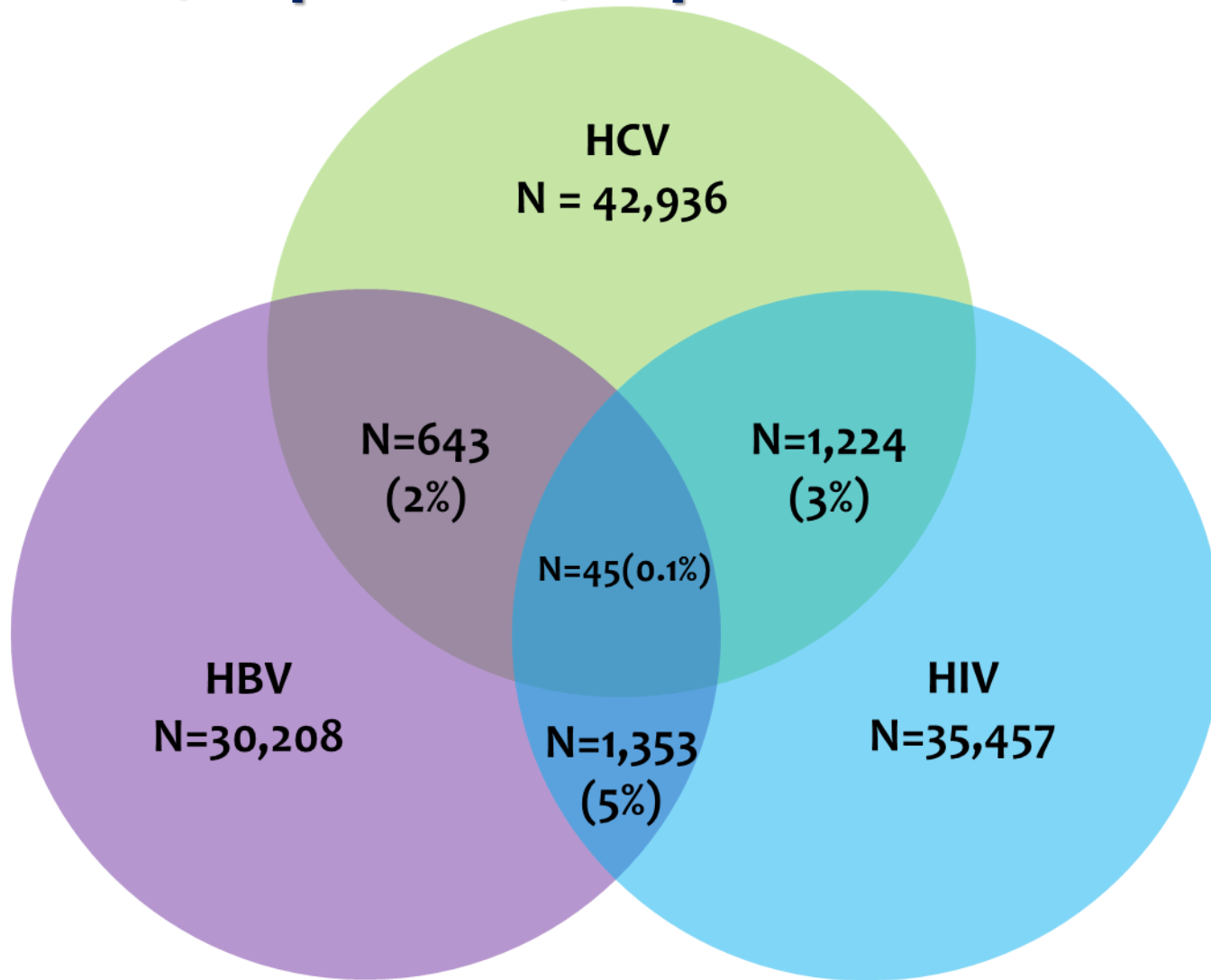
HIV Infections

- Newly reported HIV, 2018¹ = 1,218
- People living with HIV, 2018¹ = 35,457
- Average lifetime treatment cost of HIV⁹ = >\$370,000/person



¹NC HIV/STD/Hepatitis Annual Surveillance Report, 2018; ²CDC Surveillance for Viral Hepatitis (<https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#Ref01>). ³In the absence of liver transplant (C. Everett Koop Institute, Dartmouth <http://www.epidemic.org/thefacts/theepidemic/USHealthCareCosts/>); ⁴Based on estimates from NC Ryan White CAREWare and the Medical Monitoring Project in NC; ⁵CDC HIV and Viral Hepatitis Fact Sheet https://www.cdc.gov/hiv/pdf/library/factsheets/hiv_and_viral_hepatitis.pdf; ⁶HIV/AIDS and Viral Hepatitis, CDC <https://www.cdc.gov/hepatitis/populations/hiv.htm>; ⁷Prescription & Drug Overdoses Fact Sheet, 2016 <http://www.injuryfreenc.ncdhhs.gov/About/PrescriptionFactSheet2015-Oct2016.pdf>; ⁸Prescription & Drug Overdoses Fact Sheet, 2017 https://ncdhhs.s3.amazonaws.com/s3fs-public/Prescription%20fact%20sheet%20SEC_FINAL_03_07_17.pdf; ⁹HIV Cost-effectiveness, CDC: <https://www.cdc.gov/hiv/programresources/guidance/costeffectiveness/index.html>.

2018 HIV/Hepatitis B/Hepatitis C Coinfection



Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 26, 2019) and North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2019).

